

Notice of Allowability

Application No.

09/724,028

Examiner

Joyce Tung

Applicant(s)

FISHER ET AL.

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/24/2003.
2. ☒ The allowed claim(s) is/are Claims 1-7 and 16-17 (final claims 1-9).
3. ☒ The drawings filed on 28 November 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>1142004</u> . |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

EXAMINER'S AMENDMENT

Following the entry of the amendment filed 11/24/2003, the claims 1-7 and 16-17 are pending.

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on 1/14/2004, with Lisa B Kole requested an extension of time for one MONTH(S) and authorized the Director to charge Deposit Account No. 02-4377 the required fee of \$ 110.00 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

In claim 1, step C) (ii), after " the single-stranded cDNA", insert -- generated by step (B) --.

3. The following is an examiner's statement of reasons for allowance:

Concerning claims 1-7 and 16-17, no prior art has been found teaching or suggesting the method of isolating a double stranded cDNA having a nucleotide sequence of a complete open reading frame by using the first primer which has a first sequence at the 3' end of the primer hybridizing to the 3' end of an isolated single stranded cDNA, a second sequence linked to the first sequence, a third sequence linked to the second sequence and forming a loop structure, and a fourth sequence linked to the third sequence at the 5' end of the first primer and complementary to the second sequence, the second primer which specifically binds to the single stranded cDNA generated from the DNA synthesis step (B) and the third primer which comprises a sequence

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identical to the third sequence of the first primer linked to a sequence identical to a portion of the second sequence of the first primer. The method has step A) to mix the isolated single stranded cDNA, the first primer and polymerase, and step B) to synthesize cDNA under hybridization condition with the first primer and step C) to produce a double stranded cDNA product with the second and third primers, thereby isolating the cDNA having the sequence of the complete open reading frame.

The closest prior art is the reference of Caetano-Anolles (WO 95/33853). Caetano-Anolles et al. disclose a method of DNA fingerprinting which uses at least one oligonucleotide to prime arbitrary segment of a DNA template (See pg. 2, lines 1-5). The primer has 5' end a hairpin structure (See pg. 4, lines 18-21 and pg. 12, forth paragraph). Caetano-Anolles et al also disclose that the invention provides improved nucleic acid amplification involving multiple primers (See pg. 5, fifth paragraph). However, Caetano-Anolles et al. do not teach or suggest using the primers which have the structure of the first primer comprising a 3' end sequence hybridizing to the single stranded cDNA, linked to the second sequence, linked to the third sequence which forms a loop structure and linked to the forth sequence at 5' end of the primer which is complementary to the second sequence, the second primer which binds to the single stranded cDNA and the third primer which comprises a sequence identical to the third sequence of the first primer, linked to a sequence identical to a portion of the second sequence of the first primer, and isolating the generated cDNA having the sequence of the complete open reading frame.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (571) 272-0790. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (571) 272-0782 on Monday-Friday from 10:00 AM-6:00 PM.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

5. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1637 via the PTO Fax Center located in Crystal Mall 1 using (703) 872-9306. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

J.T
January 28, 2004

Jeffrey Siew
JEFFREY SIEW
PRIMARY EXAMINER

2/4/04